increased secretion from the skin, in this respect corresponding to muscarin and pilocarpine, with which substances it is further allied, for muscarin produces giddiness, fainting, prostration, stupor, breathlessness. Internally given, it contracts the pupil; applied locally to the eye, it dilates the pupil; whilst, like pilocarpine, it produces muscular trembling and accelerated pulse.

Mr. Tweedy saw the patients and examined the eyes while under the influence of pituri. He reports as follows: "I have little to add to your account of the effect on the eye of the local application of a solution of pituri, except to note that, although the pupil was widely (not fully) dilated, the accommodation was almost unaffected. The patients could read quite well, and they did not complain of much mistiness. Pituri seems to be a weak mydriatic; strong enough to dilate the pupil for a few hours, but not sufficient to impair the action of the ciliary muscle. Except the smarting, a weak solution of atropine—say one-thirtieth of a grain to an ounce—would produce the same symptoms as the one per cent. solution of pituri, perhaps even including the preliminary contraction. Ophthalmoscopically I discovered nothing."

The Therapeutic Value of Salicylic Acid.

Professor **BARTELS** (*Deutsche Medic. Wochenschrift*, No. 32–35) states that salicylate of soda acts as powerfully as salicylic acid, although containing only 0.68 of the free acid; that no deep-seated lesions of the intestinal mucous membrane occur even after large doses; but that eruptions and loss of appetite frequently occur in non-feverish patients after the use of the free acid.

The action of salicylic acid is twofold, antipyretic and specific. The antipyretic action may be observed in any febrile patient. In the hectic fever of phthisis it has been given with varying results. In some cases the action was slight or the drug was not well borne, whilst in others it was given for months, producing cessation of the daily rise of temperature, with wonderful restoration of strength and of weight. In typhoid fever, the nerve symptoms became so severe during its administration that it was discontinued. In other fevers it was found to be much less powerful in its action than quinine. Diminution in the frequency of the pulse, profuse sweating, dryness of the mouth, and slight albuminuria, also result from its employment. In diabetic patients, large doses produced severe nervous symptoms; staggering as in intoxication, delirium, and even maniacal violence. These bad effects often restrict the use of the salicylic preparations to small doses, thus decreasing its value as an antipyretic.

Dr. Bartels has employed salicylic acid as a specific in acute rheumatism and in diabetes mellitus, with great success. In the former there was a steady fall of temperature, with remission of the symptoms, and in a few days convalescence; good results were obtained also in chronic rheumatic arthritis. In diabetes mellitus large doses were given, which brought on brain-symptoms, but there was great reduction in the amount of sugar in the urine, and increase in the weight of the body. He concludes that the salicylate of soda has no prophylactic action against infectious diseases, for a diabetic patient, whilst taking large doses of this drug, was seized with erysipelas and died.—*London Med. Record*, Dec. 15, 1878.

Physiological and Therapeutical Effects of Adonis Vernalis.

As it had been noticed that the effects caused by an extract of adonis vernalis were similar to those produced by digitalis, and that in some cases of compensatory troubles the action of the heart could be restored by it, even if digitalis had proved unsuccessful, **BUBNOFF** undertook, at Professor Botkin's instigation, to make a series of experiments on frogs, which he subsequently published in the

St. Petersburger Med. Woch. (January 6, 1879). The results of his experiments are as follows: A diluted solution of the extract. adonidis vernalis aquosum was injected into the crural lymph-bag of a frog, the heart of which had previously been laid bare. It was then noticed, after a certain lapse of time, which in most cases was in indirect proportion to the dose which had been injected, that the ventricle began to contract more strongly. During the diastole the surface of the latter was covered by swellings of different size, resembling aneurisms. These disappeared entirely during the diastole. In a few minutes the contractions of the ventricle decrease in number, though not in strength, and the swellings become much larger. Later on the ventricle often remained for several seconds in systole, the sinus venosus and the auricles were considerably dilated and worked unsuccessfully; at last, after two to four contractions of the auricles a small quantity of blood passed into the ventricle, which again contracted spasmodically, and this was repeated for a few minutes. At last the heart assumed a very characteristic shape, the ventricle was strongly contracted and sometimes very pale, the atrium and sinus venosus were considerably dilated. The contractions of the heart and sinus went on for some time, then stopped, and the heart ceased to beat, still retaining the shape already noted. The frog generally survived the operation, and jumped about, although his heart had ceased beating. If the heart in this state is stimulated by pricking the ventricle with a needle, it responds at first by a few contractions of the atria and the ventricle; after a while the prick only calls forth a few useless contractions of the atria. In short, after a certain time, stimulation by pricking has not the least effect in causing the heart to pulsate. The heart retains its very characteristic shape in spite of all stimulations or irritations which may be applied, such as hypodermic injections of atropin, faradic currents, section of the vagus nerve on both sides, etc. All these experiments, combined with the clinical experiences, lead to the supposition that adonis vernalis contains a poison analogous to digitalis, which strongly affects the heart, but has certain peculiar properties, one of them being the total absence of dangerous effects, even when this has been taken for a long time consecutively.—*London Med. Record*, Feb. 15, 1879.

First Insensibility from the Inhalation of Ether.

At a late meeting of the Therapeutical Society of New York (*New York Med Journal*, March, 1879), Dr. R. F. Weir, Chairman of the Committee on Surgical Procedures and Appliances, presented a report on the first insensibility from ether, as described by Dr. John H. Packard in the *American Journal of the Medical Sciences* for July, 1877.

Dr. Weir stated that a number of cases have been reported to the committee confirmatory of the statements of Dr. Packard, but certain differences were observed. No question as to the satisfactory degree of anæsthesia exists, but the duration of it in several instances exceeded the time allotted to it by Dr. Packard —occasionally reaching to three minutes; also, while all recollection of pain was done away with, yet at times the patients would by movement, and sometimes by cries, give evidence of sensation during the incision; and, still further, it was noticed by Dr. W. T. Bull and himself that, even when the insensibility was marked, muscular relaxation was ofttimes insufficient to permit of a reduction of a dislocation or a displaced fracture.

One case reported by Dr. Gibney shows that in chloroform inhalation the "first insensibility" exists—a point upon which Dr. Packard, from want of experience, was unable to speak. Dr. Weir adds that this "first insensibility," or, as it is commonly called in New York, "primary anæsthesia," has now become fully established in the practice of the New York and Roosevelt Hospitals.